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EXAMINER	
MANNING, JOHN	

ART UNIT	PAPER NUMBER
2614	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/610,773	YAMADA, ISAO	
	Examiner	Art Unit	
	John Manning	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-20 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2, 4, 7-8, 10-14 and19 are rejected under 35 U.S.C. 102(e) as being anticipated by Oosterhout et al. (US Pat No. 6,405,371).

In regard to claim 1, Oosterhout et al. discloses a system for navigation through television programs. The claimed limitation of symbolic label forming means, which forms symbolic labels indicative of the content of said broadcast programs is met by the system depicted in Figure 1. The "transmitter also comprises a mosaic signal-composing circuit 13 which receives the television signals of the television programs and creates a mosaic signal MOS of, for example, 4*4 sub-images as shown in FIG. 2. The mosaic signal is digitally encoded by an MPEG encoder 14 and added to the transmitted signal" (Col 2, Lines 46-52). The claimed limitation of a transmission means, which transmits said broadcast programs and symbolic labels is also met by the system depicted by Figure 1. "The encoded signals are applied to a multiplexer and modulator 12 for transmission through a transmission channel 3 which may be a satellite, terrestrial or cable broadcast network" (Col 2, Lines 33-36).

In regard to claim 2, the claimed limitation that broadcast program comprises programs that supplement other broadcast programs is met by Figure 9. "The mosaic signal is digitally encoded by an MPEG encoder 14 and added to the transmitted signal" (Col 2, Lines 50-53). The mosaic signal contains programs that supplement other programs.

In regard to claim 4, the mosaic signal-composing circuit 13 creates the mosaic signal, which could be an array of 4*4 sub images. Also, "the EPG also includes data which links the position of each sub-image in the mosaic signal MOS with the program number n of the associated television program TV-n" (Col 2, Lines 52-55). The encoded mosaic images and EPG information are inherently different from the data adapted for video or audio output.

In regard to claim 7, the system provides display control means for controlling as to whether or not said symbolic labels are displayed on a receiver set. "In a step 304, it is checked whether the EPG button on the remote control device is pressed again. The EPG button is a toggle command to switch the mosaic screen on and off" (Col 3, Lines 49-50).

In regard to claim 8, Oosterhout et al. discloses a system for navigation through television programs. The claimed step of forming symbolic labels indicative of the content of said broadcast programs is met by the system depicted in Figure 1. The "transmitter also comprises a mosaic signal-composing circuit 13 which receives the television signals of the television programs and creates a mosaic signal MOS of, for example, 4*4 sub-images as shown in FIG. 2. The mosaic signal is digitally encoded by

an MPEG encoder 14 and added to the transmitted signal" (Col 2, Lines 46-52). The claimed step of transmitting said broadcast programs and symbolic labels is also met by the system depicted by Figure 1. "The encoded signals are applied to a multiplexer and modulator 12 for transmission through a transmission channel 3 which may be a satellite, terrestrial or cable broadcast network" (Col 2, Lines 33-36).

In regard to claim 10, the claimed limitation of reception means, which receives said broadcast programs and symbolic labels is met by Figure 1-Item 2. "The receiver 2 comprises a demodulator and demultiplexer 21 for receiving a selected one of the television programs. A program is selected by applying its program number n to the demodulator and demultiplexer. The selected television signal is applied to an MPEG decoder 22 which decodes the audio component of the signal for reproduction by a speaker 23 and the video component of the signal for display on a display screen 24. The embedded EPG data is a further output signal of the demodulator and demultiplexer 21" (Col 2, Lines 58-67). The claimed limitation of display control means, which operates on a display device to display said symbolic labels is met by Figure 1-Item 2. "The receiver further comprises a graphics generator 28 which is controlled by the microprocessor. An On-Screen-Display signal OSD is generated by this graphics generator and added to the video image on screen through an adder stage 29" (Col 3, Lines 11-15). The claimed limitation of output control means which operates in response to the operation of selection of a symbolic label to release data of a broadcast program corresponding to the selected symbolic label is met by Figure 1-Item 2. "In a step 303, the microprocessor receives cursor control commands from the remote

control device and causes the graphics generator to display a cursor on screen. The cursor may take any convenient form. In FIG. 4, the cursor is shown as a framework around a selectable display item, such as a framework 45a around a sub-image or a framework 45b around an on-screen button. While moving the cursor across the sub-images on the mosaic screen with the cursor control keys (261 in FIG. 1), the receiver reproduces the audio signal of the associated television program" (Col 3, Lines 39-48).

In regard to claims 11 and 12, the system provides display control means for controlling as to whether or not said symbolic labels are displayed on a receiver set. "In a step 304, it is checked whether the EPG button on the remote control device is pressed again. The EPG button is a toggle command to switch the mosaic screen on and off" (Col 3, Lines 49-50).

In regard to claim 13, the claimed limitation of said reception means also receiving other broadcast program, said display control means displaying said symbolic labels together with said other broadcast program is met by Figure 9. The symbolic labels are overlaid on the main displayed broadcast so that "the user can easily "zap" from one television program to another" (Col 5, Lines 22-23).

In regard to claim 14, the system provides display control means for controlling as to whether or not said symbolic labels are displayed on a receiver set. "In a step 304, it is checked whether the EPG button on the remote control device is pressed again. The EPG button is a toggle command to switch the mosaic screen on and off" (Col 3, Lines 49-50). "In a step 303, the microprocessor receives cursor control commands from the remote control device and causes the graphics generator to display

a cursor on screen. The cursor may take any convenient form. In FIG. 4, the cursor is shown as a framework around a selectable display item, such as a framework 45a around a sub-image or a framework 45b around an on-screen button. While moving the cursor across the sub-images on the mosaic screen with the cursor control keys (261 in FIG. 1), the receiver reproduces the audio signal of the associated television program" (Col 3, Lines 39-48).

In regard to claim 19, Figure 1 meets the limitation of "an information processing method which receives and processes television broadcast programs and symbolic labels indicative of the content of said broadcast programs". Figure 1 describes the system that carries out the information possessing method. The claimed step of receiving said broadcast programs and symbolic labels is met by Figure 1-Item 2. "The receiver 2 comprises a demodulator and demultiplexer 21 for receiving a selected one of the television programs. A program is selected by applying its program number n to the demodulator and demultiplexer. The selected television signal is applied to an MPEG decoder 22 which decodes the audio component of the signal for reproduction by a speaker 23 and the video component of the signal for display on a display screen 24. The embedded EPG data is a further output signal of the demodulator and demultiplexer 21" (Col 2, Lines 58-67). The claimed step of controlling a display device to display said a symbolic label is met by Figure 1-Item 2. "The receiver further comprises a graphics generator 28 which is controlled by the microprocessor. An On-Screen-Display signal OSD is generated by this graphics generator and added to the video image on screen through an adder stage 29" (Col 3, Lines 11-15). The claimed

step of controlling, in response to the operation of selection of a symbolic label, the release of data of a broadcast program corresponding to the selected symbolic label is met by Figure 1-Item 2. "In a step 303, the microprocessor receives cursor control commands from the remote control device and causes the graphics generator to display a cursor on screen. The cursor may take any convenient form. In FIG. 4, the cursor is shown as a framework around a selectable display item, such as a framework 45a around a sub-image or a framework 45b around an on-screen button. While moving the cursor across the sub-images on the mosaic screen with the cursor control keys (261 in FIG. 1), the receiver reproduces the audio signal of the associated television program" (Col 3, Lines 39-48).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 5, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oosterhout el al. in view of Remillard (US Pat No 5,561,708).

In regard to claim 5, Oosterhout et al. discloses a system for navigation through television programs. The reference fails to explicitly disclose that the broadcast programs are composed of data adapted for printout. The Remillard reference teaches the printing data adapted for printout so as to allow the user to obtain a hardcopy of the information presented on the television. "Use of a printer connected to the controller

provides the user with an ability to produce a hardcopy of the information displayed on the television" (Col 3, Lines 51-53). "The electronic device 20 includes an interface for a printer 56. The electronic device 20 directs selected, captured images to the printer 56 for hardcopy output. The printer 56 prints results of queries to the various selected facilities, the sketching with the pointing device 54, or any other screen displayed" (Col 5, Lines 36-40). Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Oosterhout et al. reference to with printing data adapted for printout so as to allow the user to obtain a hardcopy of the information presented on the television.

In regard to claim 16, Oosterhout et al. discloses a system for navigation through television programs. The reference fails to explicitly disclose that the broadcast programs are composed of data adapted for printout. The Remillard reference teaches the printing data adapted for printout so as to allow the user to obtain a hardcopy of the information presented on the television. "Use of a printer connected to the controller provides the user with an ability to produce a hardcopy of the information displayed on the television" (Col 3, Lines 51-53). "The electronic device 20 includes an interface for a printer 56. The electronic device 20 directs selected, captured images to the printer 56 for hardcopy output. The printer 56 prints results of queries to the various selected facilities, the sketching with the pointing device 54, or any other screen displayed" (Col 5, Lines 36-40). Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Oosterhout et al. reference to with printing

data adapted for printout so as to allow the user to obtain a hardcopy of the information presented on the television.

In regard to claim 18, Oosterhout et al. discloses a system for navigation through television programs. The reference fails to explicitly disclose that broadcast programs are composed of data adapted for ordering commodities, said output control means operating to transmit said order data. The Remillard reference teaches receiving broadcast programs are composed of data adapted for ordering commodities and upon user input transmitting order control data so as to allow the user to make purchase from home. For "certain programs, such as home shopping programming, the user may manually overlay a purchasing menu in the window 80. When a desired item is shown, the user is able to cause the electronic device 20 to issue appropriate purchase information to the interactor facility, automatically" (Col 5, Lines 61-66). Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Oosterhout et al. reference to with receiving broadcast programs are composed of data adapted for ordering commodities and upon user input transmitting order control data so as to allow the user to make purchase from home.

5. Claims 3, 6, 9, 15, 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oosterhout el al.

In regard to claim 3, the Oosterhout et al. discloses a system for navigation through television programs. The reference fails to explicitly disclose said broadcast programs and symbolic labels and said other broadcast programs are transmitted on separate transmission paths. However, the examiner gives OFFICIAL NOTICE that it is

notoriously well known in the art to transmit data on separate transmission paths so as to transmit broadcast programs in a one directional manner, while providing bidirectional data transfer of the supplemental data for interactive viewing. Consequently, it would have been clearly obvious to one of ordinary skill in the art to implement the Oosterhout et al. reference with data transmission on separate transmission paths so as to transmit broadcast programs in a one directional manner, while providing bidirectional data transfer of the supplemental data for interactive viewing.

In regard to claim 6, the Oosterhout et al. discloses a system for navigation through television programs. The reference fails to explicitly disclose that the transmission means alters the transmission band for transmitting said broadcast programs and symbolic labels depending on the quantity of data of broadcast programs and symbolic labels to be transmitted. However, the examiner gives OFFICIAL NOTICE that it is notoriously well known in the art to alters the transmission band for transmitting said broadcast programs as to increase efficiency by bandwidth conservation. Consequently, it would have been clearly obvious to one of ordinary skill in the art to implement the Oosterhout et al. reference with transmission means that alters the transmission band for transmitting said broadcast programs and symbolic labels depending on the quantity of data of broadcast programs and symbolic labels to be transmitted so as to increase efficiency by bandwidth conservation.

In regard to claim 9, the claimed step of forming symbolic labels indicative of the content of said broadcast programs is met by the system depicted in Figure 1. The "transmitter also comprises a mosaic signal-composing circuit 13 which receives the

television signals of the television programs and creates a mosaic signal MOS of, for example, 4*4 sub-images as shown in FIG. 2. The mosaic signal is digitally encoded by an MPEG encoder 14 and added to the transmitted signal" (Col 2, Lines 46-52). The claimed step of transmitting said broadcast programs and symbolic labels is also met by the system depicted by Figure 1. "The encoded signals are applied to a multiplexer and modulator 12 for transmission through a transmission channel 3 which may be a satellite, terrestrial or cable broadcast network" (Col 2, Lines 33-36). The reference fails to explicitly disclose "a medium which operates on a computer to run an operations program which implements the information processing for producing television broadcast programs". However, it is submitted that it would have been obvious to one of ordinary skill in the art at the time of the invention to implement the Oosterhout et al. system with "a medium which operates on a computer to run an operations program which implements the information processing for producing television broadcast programs" so as to reduce the cost and size of the system.

In regard to claim 15, the Oosterhout et al. discloses a system for navigation through television programs. The reference fails to explicitly disclose display control means that operates on separate display devices to display said other broadcast program and said symbolic labels. However, it is submitted that it would have been obvious to one of ordinary skill in the art at the time of the invention to implement the Oosterhout et al. system with display control means that operates on separate display devices to display said other broadcast program and said symbolic labels so as to not obscure the either the broadcast program or the symbolic labels.

In regard to claim 17, the Oosterhout et al. discloses a system for navigation through television programs. The reference fails to explicitly disclose memory means, which operates in response to the operation of selection of a symbolic label to store data of a broadcast program corresponding to the selected symbolic label. However, it is submitted that it would have been obvious to one of ordinary skill in the art at the time of the invention to implement the Oosterhout et al. system with memory means, which operates in response to the operation of selection of a symbolic label to store data of a broadcast program corresponding to the selected symbolic label so as to view the broadcast program at a later time.

In regard to claim 20, the claimed step of receiving said broadcast programs and symbolic labels is met by Figure 1-Item 2. "The receiver 2 comprises a demodulator and demultiplexer 21 for receiving a selected one of the television programs. A program is selected by applying its program number n to the demodulator and demultiplexer. The selected television signal is applied to an MPEG decoder 22 which decodes the audio component of the signal for reproduction by a speaker 23 and the video component of the signal for display on a display screen 24. The embedded EPG data is a further output signal of the demodulator and demultiplexer 21" (Col 2, Lines 58-67). The claimed step of controlling a display device to display said a symbolic label is met by Figure 1-Item 2. "The receiver further comprises a graphics generator 28 which is controlled by the microprocessor. An On-Screen-Display signal OSD is generated by this graphics generator and added to the video image on screen through an adder stage 29" (Col 3, Lines 11-15). The claimed step of controlling, in response to

the operation of selection of a symbolic label, the release of data of a broadcast program corresponding to the selected symbolic label is met by Figure 1-Item 2. "In a step 303, the microprocessor receives cursor control commands from the remote control device and causes the graphics generator to display a cursor on screen. The cursor may take any convenient form. In FIG. 4, the cursor is shown as a framework around a selectable display item, such as a framework 45a around a sub-image or a framework 45b around an on-screen button. While moving the cursor across the sub-images on the mosaic screen with the cursor control keys (261 in FIG. 1), the receiver reproduces the audio signal of the associated television program" (Col 3, Lines 39-48). The reference fails to explicitly disclose "A medium which operates on a computer to run an operation program for receiving and possessing television broadcast programs and symbolic labels indicative of the content of said broadcast programs, said operation program". However, it is submitted that it would have been obvious to one of ordinary skill in the art at the time of the invention to implement the Oosterhout et al. system with "a medium which operates on a computer to run an operations program which implements the information processing for producing television broadcast programs" so as to reduce the cost and size of the system.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure as follows.

- The Shiga et al. (US Pat No. 6,005,562) reference discloses an electronic program guide system using images of reduced size to identify respective programs
- The Alexander et al. (US Pat No. 6,177,931) reference discloses a system and method for displaying and recording control interface with television programs, video, advertising information and program scheduling information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Manning whose telephone number is 703-305-0345. The examiner can normally be reached on M-F: 7:30 - 5:00 (off every other Wednesday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W Miller can be reached on 703-305-4795. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-9695 for regular communications and 703-746-9695 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is (703) 308-HELP.

JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

JM
March 22, 2004